



CLAIMS

We claim:

1. (Currently amended) A fluid sampler comprising:
a substantially watertight housing, and
at least one spring-loaded syringe that stores potential energy operably connected
to at least one solenoid valve that operates to release said stored potential energy, a
structure said spring-loaded syringe and said solenoid valve both contained at least
partially within said housing, said spring-loaded syringe [[for]] drawing fluid from
outside of said housing into said housing, wherein said structure for drawing fluid is
powered by stored using said stored potential energy within said housing.
2. Canceled
3. Canceled
4. (Currently amended) The fluid sampler of claim 1, wherein said ~~structure~~
~~for drawing fluid~~ sampler further comprises a filter assembly.
5. (Original) The fluid sampler of claim 1, wherein said housing is
substantially airtight.

6. (Currently amended) The fluid sampler of claim 3, further comprising a control device for issuing electronic activating signals, wherein said activating signals applied to said solenoid valve results in fluid being drawn into said spring-loaded syringe structure for drawing fluid.

7. (Original) The fluid sampler of claim 6, wherein said control device is a microprocessor or a microcomputer.

8. (Original) The fluid sampler of claim 7, further comprising at least one of an electronic memory and a clock.

9. (Original) The fluid sampler of claim 7, further comprising at least one sensor, said sensor communicably connected to said microcomputer or said microprocessor.

10. (Original) The fluid sampler of claim 9, wherein said at least one sensor is selected from the group consisting of a pH sensor, a temperature sensor, a dissolved oxygen probe, a conductivity sensor, a salinity sensor and an ion selective electrode.

11. (Original) The fluid sampler of claim 9, wherein fluid collection can be initiated by a signal from said sensor.

12. (Original) The fluid sampler of claim 9, wherein said sampler includes a memory, said microprocessor or microcomputer processing and storing information from said sensor.

13. (Original) The fluid sampler of claim 12, wherein said stored information comprises environmental conditions present at times of fluid sampling.

14. (Original) The fluid sampler of claim 7, further comprising at least one antenna, said antenna adapted for receiving a wireless activating signal.

15. (Original) The fluid sampler of claim 14, further comprising a receiving device connected to said antenna, said receiving device adapted to receive wireless transmissions from outside of said housing.

16. (Original) The fluid sampler of claim 14, further comprising a transceiver for sending wireless signals to at least one location outside of said housing.

17. (Currently amended) A fluid sampling system, comprising:
a plurality of fluid samplers, said fluid samplers each including a substantially watertight housing, and at least one spring-loaded syringe that stores potential energy operably connected to at least one solenoid valve that operates to release said stored potential energy ~~a structure~~, said spring-loaded syringe and said solenoid valve both contained at least partially within said housing ~~[[for]]~~, said spring-loaded syringe

~~drawing fluid from outside of said housing into said housing, said structure for drawing fluid is powered by stored~~ using said stored potential energy ~~within said housing,~~

wherein at least one of said plurality of fluid samplers is a master sampler, said master sampler including at least one antenna and a transceiver connected to said antenna.

18. (Original) The fluid sampling system of claim 17, wherein said master sampler relays instructions to and from other of said plurality of fluid samplers.

19. (Currently amended) A method for sampling fluid, comprising the steps of:

providing a substantially watertight housing and ~~structure contained at least partially within said housing for drawing fluid from outside of said housing into said housing~~ at least one spring-loaded syringe that stores potential energy operably connected to at least one solenoid valve that operates to release said stored potential energy, said spring-loaded syringe and said solenoid valve both contained at least partially within said housing, said structure for, and

drawing said fluid from outside of said housing into said housing into said spring-loaded syringe using said stored potential energy.

20. (Added) The fluid sampler of claim 1, wherein said solenoid valve when closed seals said fluid drawn from outside of said housing inside said spring-loaded syringe.

21. (Added) The fluid sampling system of claim 17, wherein said solenoid valve when closed seals said fluid drawn from outside of said housing inside said spring-loaded syringe.

22. (Added) The method of claim 19, further comprising the step of sealing said fluid inside said spring-loaded syringe through actuation of said solenoid valve.